

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017209**Date Inspected:** 24-Sep-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Xian Ping**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder (OBG)**Summary of Items Observed:**

On this date Caltrans Office of Structural Material (OSM) Quality Assurance (QA) Inspector, D.Sukanthan was present during the time noted above for observations relative to the work being performed.

OBG # BAY 2

This QA inspector received ZPMC Non Destructive Testing (NDT) notification 06754 to perform Magnetic particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control Personnel. This QA Inspector generated a Magnetic particle Test report for this date. The member is identified as Angular Plate. The weld tested is identified as follows:

(AP3032-001-1022, 1023, 1026, 1027, 1020, 1021, 0128, 1029)

This QA Inspector randomly observed the following work in progress:

OBG # BAY 2

During the Caltrans Quality Assurance in-process observations of the fabrication of longitudinal diaphragm LD3048-001, this Quality Assurance Inspector (QA) discovered the following issue ZPMC personnel heat straightening excessive distortion on Seismic Performance Critical Material (SPCM) material distorted by welding without the Engineers approval. The Longitudinal Diaphragm is identified as LD3048-001. The plates are identified as X4916A (SPCM) and X4916B (Non SPCM). The deviation from flat as measured by this QA is

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10mm per 1000mm. The Material thickness is 35mm. ZPMC appeared to be following Heat Straightening procedure HSR1-(B)-9439. This QA notified ZPMC Certified Welding Inspector (CWI) identified as Mr. Tian Lei of this issue and that an incident report would be generated.

OBG # BAY 3

This QA observed ZPMC qualified welding personnel identified as 055491 perform Flux Cored Arc Welding (FCAW) Process on weld joint CA3013B-163,164. ZPMC Quality Control Personnel (QC) identified as Mr. Zheng Hai Feng was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132-3.

This QA observed ZPMC qualified welding personnel identified as 051356 perform Flux Cored Arc Welding (FCAW) Process on weld joint CA3013C-167,168. ZPMC Quality Control Personnel (QC) identified as Mr. Zheng Hai Feng was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132-3.

OBG # BAY 7

This QA observed ZPMC qualified welding personnel identified as 048625 perform Flux Cored Arc Welding (FCAW) Process on weld joint W2-SB4-001-126,127,128,129. ZPMC Quality Control Personnel (QC) identified as Mr. Wang Liang was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132-3.

This QA observed ZPMC qualified welding personnel identified as 053742 perform Flux Cored Arc Welding (FCAW) Process on weld joint W2-SB1-017-026,027. ZPMC Quality Control Personnel (QC) identified as Mr. Wang Liang was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132-3.

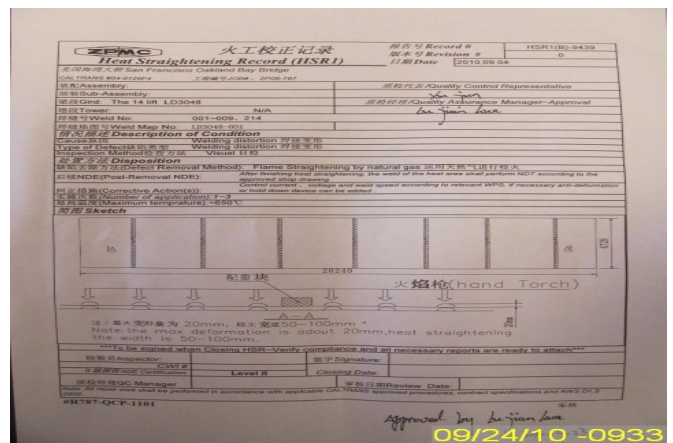
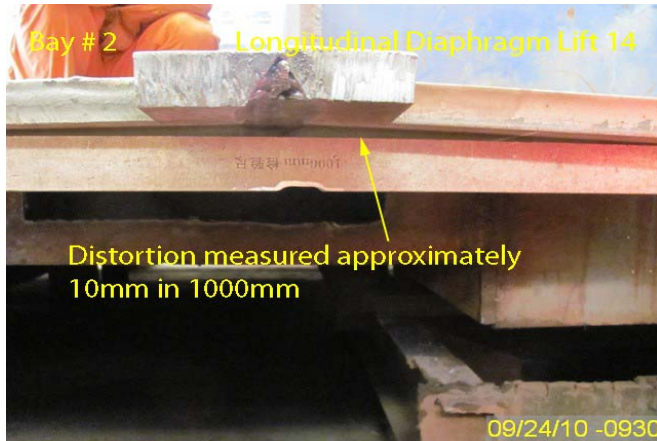
OBG # BAY 8

This QA observed ZPMC qualified welding personnel identified as 067947 perform Flux Cored Arc Welding (FCAW) Process on weld joint BK004A5-058-090. ZPMC Quality Control Personnel (QC) identified as Mr. Feng Ya Jun was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2231-B-U2-F.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

As mention above

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-00422372, who represents the Office of Structural Materials for your project.

Inspected By: Sukanthan,Dhanasingh

Quality Assurance Inspector

Reviewed By: Hall,Steven

QA Reviewer